U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II
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MEMORANDUM

TO: Steve Cipot - Project Manager
ERRD/NJRB

FROM: Andy Crossland - Geologist
ERRD/PSB/TST

DATE: Friday, October 13, 2000

SUBJECT: Review of the *Work Plan for Delineating and Characterizing Elevated Lead Concentrations in Soil*, L.E. Carpenter, Wharton, New Jersey.

In response to your request, I have reviewed the document listed above. If you have any questions concerning these comments, please feel free to call me at x4436.

As with the work plan addressing free product issues, this document is lacking in many of the important details which are to be expected in a work plan. EPA guidance on preparing a work plan should be consulted and all of the relevant information should be included. This is required to ensure both the quality of the data and that all parties can be satisfied that the work will achieve its goals. Review of specifics of the plan will have to occur once a more detailed work plan is presented.

The following comments point to some of the most obvious omissions.

1. Initial surface soil samples are not indicated on the cited figure. Are these intended to be co-located with the test pits? If so, some of these points will produce redundant data. How many samples are included in the initial plan? Is there a plan for how far off to step from a contaminated sample in the additional delineation? On what basis will it be determined that the delineation is complete? Will two samples be collected at each location as the text seems to imply by referencing "surface and near surface" samples? Are the depths of the samples tied to the risk assessment needs?

2. How many subsurface samples are intended in each test pit? At what depth intervals will samples be collected? What will trigger the decision to stop sampling deeper?

3. Some areas where test pits are planned contain floating free product. Will product laden soils likely be encountered, and if so, how will they be handled? It does not seem appropriate to dump them back into the test pits. How and where might soils be stockpiled during excavation? What decontamination procedures will be used? In what order will the test pits be excavated? For areas where pest pits are only to be sampled at deeper horizons, this needs to be clearly indicated and the intended sampling depths given.

4. Show where SPLP samples will be collected. At least three samples from the stockpiles and three from the other areas should be run to determine how results may vary.

5. How many samples will be collected at each of the background locations? At what specific depths? What is the justification behind the number and depths of samples?

6. For groundwater sampling, it seems prudent to include wells which are likely to have background levels, as well as those which are directly downgradient. Please give a tabulated list of the wells including information on where each is screened and figures showing any historical lead data. True, this information could be found in previous reports, but it should be included as part of the work plan justification.

7. By what methods will laboratory samples of soils and groundwater be analyzed?

8. For laboratory confirmation samples, how will samples be selected so as to ensure that the range of lab samples includes high and low levels of lead?

9. A one paragraph description of how a risk assessment will be conducted is not appropriate. EPA risk assessment support staff should be contacted on how to produce a work plan. Sampling may need to be guided by the specific requirements of the lead risk model to be used.

10. What data would indicate that additional remedial options should be considered? Are there circumstances under which this task will not be carried out?

11. How were background locations selected? Is it appropriate to collect samples from areas proximal to where the mine entrances were and call them "background?" Justify.

12. No sampling is indicated to delineate lead levels proximal to the high levels found at GPC-15. Is this an oversight?